

CLAIM LISTING

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A flip-flop diagonal with variable viewing angles, ~~comprises~~ comprising:

a housing body;

an eyepiece adapter unit; and

a reflective mirror unit, ~~characterized in that;~~

wherein the housing body has a cylindrical sleeve for mounting the diagonal to a telescope;

wherein the eyepiece adapter unit includes an eyepiece adapter and ~~an~~ a pivotal eyepiece support frame, ~~the eyepiece adapter is fixed on the eyepiece support frame,~~ the eyepiece support frame is pivotably mounted on the housing body, the eyepiece adapter is fixed on the eyepiece support frame so that the eyepiece adapter pivots, along with the eyepiece support frame, relative to the housing body, thereby capable of changing the view angles by rotating the eyepiece adapter between different positions; and

wherein the reflective mirror unit includes a reflective mirror, a mirror support bracket and rotary shafts, the reflective mirror is mounted in the mirror support bracket, and the mirror support bracket is pivotally mounted on the eyepiece support frame through the rotary shafts.

2. (Currently Amended) The flip-flop diagonal according to Claim 1, ~~wherein it further includes~~ comprising a spring for elastically connecting the eyepiece support frame to the mirror support bracket.

3. (Original) The flip-flop diagonal according to Claim 1, wherein the housing body includes a seat body, an upper cover plate and a side cover plate, the seat body is connected to the side cover plate, and the upper cover plate is connected to the eyepiece support frame.

4. (Currently Amended) The flip-flop diagonal according to Claim 1, ~~wherein it further includes~~ comprising a transmission and limiting fixture including a first arc groove provided on the side wall of the housing body, a second arc groove provided on the eyepiece support frame, and a restricting shaft provided on the mirror support bracket.
5. (Currently Amended) The flip-flop diagonal according to Claim 1, ~~wherein it further includes~~ comprising another transmission and limiting fixture including a notch on the housing body and the eyepiece support frame.
6. (Currently Amended) The flip-flop diagonal according to Claim 1, ~~wherein it further includes~~ comprising an anchoring fixture, a steel ball and an anchoring hole, wherein the anchoring fixture is provided between the eyepiece support frame and the housing body, ~~and includes a steel ball and an anchoring hole.~~
7. (Currently Amended) The flip-flop diagonal according to Claim 1, ~~wherein it further includes~~ comprising a locking fixture including a hand knob, which is screwed to the rotary shafts.
8. (Currently Amended) The flip-flop diagonal according to Claim 1, wherein the rotary shafts is are located on ~~the~~ a reflecting surface of the reflective mirror and intersects ~~the~~ an axis of the telescope and ~~the~~ an eyepiece.
9. (Currently Amended) The flip-flop diagonal according to Claim 1, wherein the mirror support bracket and the eyepiece support frame rotate coaxially, ~~the~~ a rotation angle of the mirror support bracket is one half of that of the eyepiece support frame.
10. (Currently Amended) The flip-flop diagonal according to any of the preceding claims, wherein the eyepiece adapter unit can be pivoted to ~~the~~ an angle of 45° or 90° with respect to ~~the~~ an axis of the telescope.